

Work Order ID 147518 -1

Thursday, June 09, 2016 8:47:20 AM

147518

Page 1

Item ID: D350-578-011

Revision ID:

Item Name: AS350/AS355 Bearpaws

Start Date: 5/25/2016 Start Qty: 4.00

Required Date: 6/8/2016 Req'd Qty: 4.00

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: MCS

Date: JUN 10 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D350-578	H								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D350-578-011 CHG006								
160	Pick Kit	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC4- 100% Inspect kits for completeness	0.00							
170									
QC	Memo	0.02							
Quality Control									

split 1054
854

DAS
6
9-89

AUG 02 2016

DAS
6
9-89

AUG 19 2016

[Signature]

DAS
26
9-89

DAS
28
9-89

AUG 04 2016

DAS
6
9-89

AUG 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
NOE L. 2013								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 147518

Thursday, June 09, 2016 8:47:20 AM

147518

Page 2

Item ID: D350-578-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: AS350/AS355 Bearpaws

Start Date: 5/25/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

180

Packaging

Packaging

0.00

0.00

Memo

Identify and pack for shipping as per PPP D350-578-011 Location: F9013

1

DAS
28
9-89

AUG 19 2016

190

190

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.07

Memo

DAS
21
9-89

AUG 19 2016

DAS
21
9-89

AUG 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
210 75								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ RAC Offset/Setup ☐ 75 Supplier ☐ 03-6 Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐																		

Picklist Print

Thursday, June 09, 2016 8:47:24 AM

Page 1

Work Order ID: 147518

147518

Parent Item: D350-578-011

D350-578-011

Parent Item Name: AS350/AS355 Bearpaws

Start Date: 5/25/2016

Required Date: 6/8/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-01-02 JLM
IPP Rev:B 08-01-09 Added Step 2 JLM Verified By:EC
IPP Rev:C 08-10-15 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2432 *D2432* Bearpaw 19" X 24"	DAS 8 9-89	Manufactured	No			160	Each	0.0000	2	8 12x 17757		1447544	DAS 26 9-89
D2529 *D2529* Washer	68-6 9 SVD	Manufactured	No			160	Each	189.0000	12	48 72.			DAS 26 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST008				189					
				145269				189		72			
D3601-1 *D3601-1* Radius Block	68-6 9 SVD	Manufactured	No				Each	268.0000		12x 48 72			DAS 26 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST045				266					
				144330				26					
				144718				240		72x			
				ST046				2					
				141269				2					
D4011-1 *D4011-1* Clamp, Short	DAS 6 9-89	Manufactured	No				Each	117.0000		6 24 36			DAS 26 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST544				117					
				145016				117		36x.			

AUG 04 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

Thursday, June 09, 2016 8:47:24 AM

Page 2

Work Order ID: 147518

147518

Parent Item: D350-578-011

D350-578-011

Parent Item Name: AS350/AS355 Bearpaws

Start Date: 5/25/2016

Required Date: 6/8/2016

Start Qty: 4.00

Required Qty: 4.00

D4012-1

Manufactured No

Each

25.0000

D4012-1

Cushion

**

DAS

26

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

FG

5

133458

5

ST545

20

144666

20

Each

93.0000

**

DAS

26

9-89

DAS

28

9-89

AN4-16A

Purchased

No

AN4-16A

Bolt

Location

Loc Qty

Loc Code

FG

5

121541

5

ST343

88

M134762

88

160

Each

3,657.000

**

DAS

26

9-89

DAS

28

9-89

NAS1149D0463J

Purchased

No

NAS1149D0463.J

WASHER

Location

Loc Qty

Loc Code

GA

86

M132035

21

M134508

65

ST260a

2000

M134852

1000

M134943

1000

ST263

1571

M134754

1571

AUG 04 2016

Thursday, June 09, 2016 8:47:24 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER :			

Picklist Print

Thursday, June 09, 2016 8:47:24 AM

Page 3

Work Order ID: 147518

147518

Parent Item: D350-578-011

D350-578-011

Parent Item Name: AS350/AS355 Bearpaws

Start Date: 5/25/2016

Required Date: 6/8/2016

Start Qty: 4.00

Required Qty: 4.00

MS21042L4

Purchased

No

160

Each

1,812.000

12

48

72x.

m135127

**

MS21042L4

Locknut

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

181

m133769

181

OVER007

1000

m134861

1000

ST303

537

m134762

537

ST305

94

m130922

94

AUG 04 2016

DAS
26
9-89
28
9-89

Thursday, June 09, 2016 8:47:24 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

DAS
28
9-89

5.0 PARTS LIST

5.1 D350-578-011/-013/-015/-017/-021 BEARPAW INSTALLATION

Qty -011	Qty -013	Qty -015	Qty -017	Qty -021	Qty -031	Part Number	Description
X						D350-578-011	BEARPAW INSTALLATION
	X					D350-578-013	BEARPAW INSTALLATION
		X				D350-578-015	BEARPAW INSTALLATION
			X			D350-578-017	BEARPAW INSTALLATION
				X		D350-578-021	BEARPAW INSTALLATION
					X	D350-578-031	WEARPLATE KIT
2						D2432F	Bearpaw
		2				D2432-3	Bearpaw
12	12	12	12	12		D2529	Washer
				2		D2672F	Bearpaw
12	12	12	12	12		D3601-1	Radius Block (Replaces D2274)
					2	D3859-041	Wearplate
6	6	6	6	6		D4011-1	Clamp (Replaces D2438)
6	6	6	6	6		D4012-1	Cushion (Replaces D2182B050)
	2					D4297-1	Bearpaw
			2			D4297-3	Bearpaw
12	12			12	12	AN4-16A	Bolt
		12	12		12	AN4-17A	Bolt
24	24	24	24	24	24	NAS1149D0463J	Washer
12	12	12	12	12	12	MS21042L4	Nut (or MS21042-4)

5.2 D350-578-111/-113/-115/-117/-121 BEARPAW INSTALLATION

Qty -111	Qty -113	Qty -115	Qty -117	Qty -121	Part Number	Description
X					D350-578-111	BEARPAW INSTALLATION
	X				D350-578-113	BEARPAW INSTALLATION
		X			D350-578-115	BEARPAW INSTALLATION
			X		D350-578-117	BEARPAW INSTALLATION
				X	D350-578-121	BEARPAW INSTALLATION
1					D350-578-011	Bearpaw Installation
	1				D350-578-013	Bearpaw Installation
		1			D350-578-015	Bearpaw Installation
			1		D350-578-017	Bearpaw Installation
				1	D350-578-021	Bearpaw Installation
1	1	1	1	1	D350-578-031	Wearplate Kit

